LPDES PERMIT NO. LA0105538 (Agency Interest No. 40198)

LPDES STATEMENT OF BASIS

FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

I. Company/Facility Name: Enterprise Products Operating LLC

Baton Rouge Fractionator and Propylene Concentrator Unit

P.O. Box 4324

Houston, Texas 77210-4324

II. Issuing Office: Louisiana Department of Environmental Quality (LDEQ)

Office of Environmental Services

Water Permits Division Post Office Box 4313

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Date Prepared: May 1, 2008

<u>LAC 33:IX Citations:</u> Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

<u>40 CFR Citations</u>: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.4901, 4903, and 2301.F.

IV. Permit Action/Status:

A. Reason For Permit Action:

Proposed reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46.

In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes

only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC 33:IX. Chapter 11) will not have dual references.

B. LPDES permit:

The permittee has applications pending for renewal of both LPDES permits LA0105538 and LA0111082. These two permitted facilities are located adjacent to each other and operate under one Title V air permit. After discussion, it has been concluded that the two LPDES permits should be combined into one. The combined permit will be issued under LA0105538. Upon issuance of the final LPDES permit (LA0105538), LPDES permit LA0111082 will be terminated. The following is a summary of the permit actions issued for both permits:

LA0105538

Permit effective date: May 1, 1999

Permit modifications: June 11, 1999 (minor mod) &

September 1, 2001 (major mod)

Permit expiration date: April 30, 2004 EPA has not retained enforcement authority

LA0111082

Permit effective date: December 1, 1999 Permit expiration date: November 30, 2004

Draft permit issue date: September 13, 2004 (draft was never finalized)

EPA has not retained enforcement authority

C. Application submittal date:

LA0105538: Application received on November 4, 2003. Application addendum received on February 9, 2004. Letter requesting combining permits received on December 13, 2004.

LA0111082: Application received on June 1, 2004. Letter requesting combining permits received on December 13, 2004.

V. Facility Information:

- A. Location 2220 North River Road, Port Allen, West Baton Rouge Parish (Latitude 30°28'55", Longitude 91°12'19").
- B. Applicant Activity -

Enterprise Products Operating LLC is comprised of two entities/facilities: The Baton Rouge Fractionator (BRF), and the Propylene Concentrator Unit (PCU). The two facilities were previously permitted under separate LPDES permits. However, this Office has determined that the two facilities can be covered under one LPDES permit.

The Baton Rouge Fractionator produces five products from a raw mix Natural Gas Liquid feed stream. The products consist of ethane, propane, isobutane, n-butane and natural gasoline. The Propylene Concentrator Unit receives a mixed propane/propylene feed from a petroleum refinery cracker and separates the mixture into two main constituents – propane and propylene. According to the permittee, of the products produced at the Propylene Concentrator Unit, 68.41% consists of propylene, 30.19 % is propane and 1.4 % is mixed butanes. These fractions were used to calculate the appropriate concentration limitations (See Section VIII.C on Page 15).

C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903)

Effluent Guidelines

There are no effluent guidelines applicable to the discharges from the Baton Rouge Fractionator. Under LPDES permit LA0111082, the Baton Rouge Propylene Concentrator facility was previously permitted in accordance with guidelines established for Organic Chemicals, Plastics and Synthetic Fibers (40 CFR 414, Subparts F and G). However, after review of the regulations, this Office has determined that in accordance with 40 CFR 414.11 (c)(5), OCPSF guidelines are not applicable to the facility due to the fact that the facility manufactures propylene and propane from a purchased refinery product. Therefore, effluent limitations for all of the toxics previously established in the permit have been removed. Additionally, after review of the DMRs submitted to the Department, it was revealed that there has been no detection of any toxic pollutant since issuance of the permit. In light of this new information and this Office's interpretation of the regulations, it has been determined that an anti-backsliding exception is appropriate under LAC 33:IX.2707.L.2.a.

Other sources of technology based limits:

- LDEQ Stormwater Guidance, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)
- Best Professional Judgement
- LPDES Hydrostatic Test General Permit (LAG670000)
- D. Fee Rate -
 - 1. Fee Rating Facility Type: Minor
 - 2. Complexity Typc: VI
 - 3. Wastewater Type: II
 - 4. SIC code: 2869, 2911, 1321

VI. Receiving Waters:

Stream: Local drainage thence to the Intracoastal Waterway

River Basin: Terrebonne Basin, Segment 120109

Designated Uses: primary contact recreation, secondary contact recreation, fish and wildlife propagation

VII. Outfall Information:

OUTFALL 001

(This outfall was Outfall 001 from LPDES permit LA0105538 issued to the Baton Rouge Fractionator facility)

- A. Type of wastewater The intermittent discharge of stormwater runoff from the south side of the facility combined with facility rinse water, fire hydrant flushings, emergency firewater pond overflow, general facility washwater, cooling tower blowdown from Outfall 201, stormwater runoff and equipment washwater from Outfall 301, and hydrostatic test water from Outfall 401
- B. Location At the point of discharge from the southwest corner of the facility prior to combining with other waters (Latitude 30°28'46", Longitude 91°12'12")
- C. Treatment None
- D. Flow Intermittent: 0.37 MGD
- E. Receiving waters Local drainage thence to the Intracoastal Waterway

F. Basin and segment – Terrebonne Basin, Segment 120109

OUTFALL 201

(This outfall was Outfall 201 from LPDES permit LA0105538 issued to the Baton Rouge Fractionator facility)

- A. Type of wastewater The continuous discharge of cooling tower blowdown
- B. Location At the point of discharge from the cooling tower blowdown discharge line on the BRF site prior to combining with the waters of Outfall 001 (Latitude 30°28'46", Longitude 91°12'07")
- C. Treatment None
- D. Flow Continuous, 0.27 MGD
- E. Receiving waters Local drainage thence to the Intracoastal Waterway
- F. Basin and segment Terrebonne Basin, Segment 120109

OUTFALL 301

(This outfall was Outfall 301 from LPDES Permit LA0105538 issued to the Baton Rouge Fractionator facility)

- A. Type of wastewater The intermittent discharge of process area stormwater runoff and equipment washwater
- B. Location At the point of discharge from the oil/water separator on the BRF side of the facility prior to combining with the waters of Outfall 001 (Latitude 30°28'49", Longitude 91°12'11")
- C. Treatment CPI Separator (oil/water separator)
- D. Flow Intermittent, 0.0038 MGD
- E. Receiving waters Local drainage thence to the Intracoastal Waterway
- F. Basin and segment Terrebonne Basin, Segment 120109

OUTFALL 401

(This outfall was Outfall 401 from LPDES permit LA0105538 issued to the Baton Rouge Fractionator facility)

- A. Type of wastewater The intermittent discharge of hydrostatic test waters from the entire facility
- B. Location At the point of discharge from the pipe or vessel being tested prior to combining with the waters and being routed to either Outfalls 001or 002.
- C. Treatment None
- D. Flow Intermittent flow is variable
- E. Receiving waters to Outfall 001 or Outfall 002 thence to local drainage thence to the Intracoastal Waterway
- F. Basin and segment Terrebonne Basin, Segment 120109

OUTFALL 002

(This outfall was formerly Outfall 001 from LPDES permit LA0111082 issued to the Baton Rouge Propylene Concentrator Unit)

- A. Type of wastewater The intermittent discharge of stormwater runoff from the north side of the facility combined with general facility washwater, fire hydrant flushings, emergency firewater pond overflow, cooling tower blowdown from Outfall 102, process area stormwater and equipment washwater from Outfall 202, and hydrostatic test water from Outfall 401
- B. Location At the point of discharge from the northwest corner of the facility prior to combining with other waters (Latitude 30°20'00", Longitude 91°12'23")
- C. Treatment None
- D. Flow Intermittent: 0.088 MGD
- E. Receiving waters Local drainage thence to the Intracoastal Waterway
- F. Basin and segment Terrebonne Basin, Segment 120109

OUTFALL 102

(This outfall was formerly Outfall 101 from LPDES permit LA0111082 issued to the Baton Rouge Propylene Concentrator Unit)

- A. Type of wastewater The continuous discharge of cooling tower blowdown
- B. Location At the point of discharge from the cooling tower blowdown discharge line on the PCU site prior to combining with the waters of Outfall 002 (Latitude 30°28'58", Longitude 91°12'20")
- C. Treatment None
- D. Flow Continuous, 0.044 MGD
- E. Receiving waters Local drainage thence to the Intracoastal Waterway
- F. Basin and segment Terrebonne Basin, Segment 120109

OUTFALL 202

(This outfall was formerly Outfall 201 from LPDES permit LA0111082 issued to the Baton Rouge Propylene Concentrator Unit)

- A. Type of wastewater The intermittent discharge of equipment washwater and process area stormwater runoff
- B. Location At the point of discharge from the oil/water separator on the PCU side of the facility prior to combining with the waters of Outfall 002 (Latitude 30°28'58", Longitude 91°12'25")
- C. Treatment CPI Separator (oil/water separator)
- D. Flow Intermittent, 0.0028 MGD
- E. Receiving waters Local drainage thence to the Intracoastal Waterway
- F. Basin and segment Terrebonne Basin, Segment 120109

VIII. Proposed Permit Limits and Rationale:

The specific effluent limitations and/or conditions will be found in the draft permit. Development and calculation of permit limits are detailed in the Permit Limit Rationale section below.

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707/40 CFR Part 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

A. PERMIT CHANGES

- 1. LPDES permits LA0111082 and LA0105538 have been combined.
- 2. All outfalls from LPDES permit LA0111082 have been renumbered.
- 3. Outfall 202 Toxic pollutants have been removed based upon new effluent data and in accordance with 40 CFR 414.11 (c)(5).
- 4. Outfall 002 Temperature, TDS and Whole Effluent Toxicity monitoring requirements have been added to the permit based upon the requirements previously established for Outfall 001 in LA0111082. Whole Effluent Toxicity testing shall be conducted by flow-weighted composite sampling of Outfalls 001 and 002.
- 5. Outfall 001 For biomonitoring testing, the draft permit requires flow-weighted composite sampling of Outfalls 001 and 002. Biomonitoring has been changed to 7-day Chronic testing based upon LDEQ's current biomonitoring policy set forth by the EPA Region VI Post- Third Round Whole Effluent Toxicity Testing Frequencies guidance document, and based upon LDEQ's implementation strategy set forth by the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008. Additionally, the dilution series has changed from the previous permit because calculation of the dilutions has been based upon a default 7Q10 of 0.1 cfs. The default 7Q10 was used in accordance with LDEQ's implementation strategy.
- 6. Outfall 101 from the currently effective LA0105538 This outfall has been removed from the permit because the facility has installed an underground drain field for sanitary wastewater.

- 7. Outfall 002 from the currently effective LA0111082 This outfall has been removed from the permit. This outfall was originally placed in the permit because it was a low area somewhat like a shallow ditch. However, over the past permit cycle, Enterprise realized that this area does not drain well into a distinct point, and stormwater runoff from the area is essentially sheet flow. Stormwater from this non-process low contamination potential area will be covered under the facility's SWPPP requirements.
- 8. Outfall 001 and Part II Paragraph N from the currently effective LA0105538 In accordance with a permit modification effective on September 1, 2001, the permit no longer contains a compliance schedule for preparation of a cost/benefit analysis regarding the cost of routing cooling tower blowdown discharges directly to the Mississippi River. The company completed an ecological assessment and cost/benefit analysis in February of 2001. Based on the information presented by the company, this Office modified LPDES permit LA0105538 and determined that the facility will not be required to route cooling tower blowdown discharges to the Mississippi River. The modification also changed the TDS limitation to 1500 mg/l. The draft permit renewal has retained the TDS limitation from the permit modification.
- 9. Outfall 201 The effluent limitation for COD has been removed because the outfall already establishes TOC limitations. In accordance with current Office practices, TOC shall be used an indicator parameter at Outfall 201. Additionally, Total Residual Chlorine monitoring has been added to the permit.
- 10. Outfall 102 The flow limitation of 0.05 MGD has been removed from the permit to be consistent with similar permitted facilities.
- 11. Outfall 001 The restriction that the facility rinsewater shall not contain soaps or additives has been removed from the permit. A condition has been added in Part II of the permit that the permittee may use only biodegradable soaps and detergents.
- 12. Outfall 001 Visible sheen requirements have been removed from the permit. The application of visible sheen requirements are typically to regulate the amount of oily sheen discharged as a result of washing equipment or vehicles. These requirements are typically established at outfalls solely comprised of washwater. The effluents discharged at Outfall 001 consist primarily of cooling tower blowdown and stormwater runoff (99% of the effluent). This Office does not typically establish visible sheen requirements for utility waters or stormwater. Therefore, it has been determined the removal of the visible sheen requirements is appropriate.

- 13. Outfall 202 The BOD and TSS limitations have been converted to concentration due to the intermittent nature of the discharge.
- 14. Outfalls 102 and 202 pH monitoring has been removed from these outfalls because pH is measured at Final Outfall 002.
- 15. Outfall 301 from the currently effective LA0111082 –This outfall has been removed. Hydrostatic test waters from the entire facility will be monitored at Outfall 401.

C. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at LAC 33:IX.2707.L.2.b/40 CFR Part 122.44(l)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to LAC 33:IX.2707.A/40 CFR Part 122.44(a) or on State water quality standards and requirements pursuant to LAC 33:IX.2707.D/40 CFR Part 122.44(d), whichever are more stringent.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgement) in the absence of guidelines, or on a combination of the two. The following is a rationale for the limitations established in the permit.

This Office has determined that Enterprise Products Operating, LLC is not subject to Best Practicable Control Technology Currently Available (BPT) or Best Available Technology Economically Achievable (BAT) effluent limitation guidelines under 40 CFR 414, Subparts F and G. However, BOD and TSS requirements from the guidelines have been applied at Outfall 002 on a BPJ basis.

Additionally, to further ensure compliance with 40 CFR 122.44(d)(I), whole effluent toxicity testing has been established for Outfalls 001 and 002 (See Section VIII.E on page 16).

Below is a summary of the proposed effluent limitations:

Outfall 001 – The intermittent discharge of stormwater runoff from the south side of the facility combined with facility rinse water, fire hydrant flushings, emergency firewater pond overflow, general facility washwater, cooling tower blowdown from Outfall 201, stormwater runoff and equipment washwater from Outfall 301, and hydrostatic test water from Outfall 401

Paramater	Monthly Avg.	Daily Max.	Frequency	Sample Type
	(mg/l)	(mg/l)		
Flow-MGD		Report	1/month	Estimate
TOC		50	1/month	Grab
Oil & Grease		15	1/month	Grab
Temperature		Report	1/month	Grab
TDS		1500	1/month	Grab
pH Min/Max Values00400	6.0	9.0	1/month	Grab
(Standard Units)	(Min) `	(Max)		
Whole Effluent Toxicity Te	sting		1/quarter	24-hr. Composite(*1)

(*1) For Whole Effluent Toxicity testing, flow-weighted composite samples taken at Outfalls 001 and 002 shall be combined and monitored in accordance with Part II, Paragraph N(3)(d)(v) of the permit.

EFFLUENT LIMITATIONS BASIS for Outfall 001:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b. and the previous permit.

TOC, Oil & Grease and pH: Limitations are based upon the previous permit and LDEQ's stormwater guidance [letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)].

TDS: Limitations for TDS are based upon the previous permit and a major permit modification effective on September 1, 2001.

Temperature: The reporting requirement for Temperature is based upon the previous permit.

Whole Effluent Toxicity Testing: See Section E below for justification of requirements.

Outfall 201 – The continuous discharge of cooling tower blowdown

<u>Paramater</u>	Monthly Avg.	Daily Max.	Frequency	Sample Type	
	(mg/l)	(mg/l)			
Flow-MGD		Report	1/month	Estimate	
TOC		50	1/month	Grab	
Oil & Grease		15	1/month	Grab	
Total Residual Chlorine		Report	1/month	Grab	

EFFLUENT LIMITATIONS BASIS for Outfall 201:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b.

TOC and Oil & Grease: Limitations are based upon the previous permit.

Total Residual Chlorine: Reporting requirements based upon requirements for similar

discharges.

Outfall 301 - The intermittent discharge of process area stormwater runoff and equipment washwater

Paramater	Monthly Avg.	Daily Max.	Frequency	Sample Type
	(mg/l)	(mg/l)		
Flow-MGD		Report	1/quarter	Estimate
TOC		50	1/quarter	Grab
Oil & Grease		15	1/quarter	Grab

EFFLUENT LIMITATIONS BASIS for Outfall 301:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b. and the previous permit.

TOC and Oil & Grease: Limitations are based upon the previous permit and LDEQ's stormwater guidance [letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)].

OUTFALL 401 - The intermittent discharge of hydrostatic test wastewater.

<u>Paramater</u>	Monthly Avg.	Daily Max.	Frequency	Sample Type
	(mg/l)	(mg/l)		
Flow-MGD	Report	Report	1/discharge	Estimate
TSS (*1 & 2)		90	1/discharge	Grab
Oil & Grease (*2)		15	1/discharge	Grab
TOC (*2)		50	1/discharge	Grab
Benzene (*2)		50 µg/i	1/discharge	Grab
Total BTEX (*2 & 3)		250 µg/l	1/discharge	Grab
Total Lead (*2)		50 μg/l	1/discharge	Grab
pH (standard units)	6.0 (min)	9.0 (max)	1/discharge	Grab

- (*1) The background concentration of Total Suspended Solids (TSS) will be allowed in the discharge if the effluent is being returned to the same water source from which the intake water was obtained. In these cases, the permit limitations will be 90 mg/L plus the concentration of TSS in the intake water. The TSS concentration of the intake water shall be reported on the Discharge Monitoring Report (DMR) along with the concentration of TSS in the effluent.
- (*2) Total Organic Carbon (TOC) shall be measured on discharges from vessels which have previously been in service; i.e., those vessels which are not new. Benzene, Total BTEX, and Total Lead shall be measured on discharges from pipe or vessels which have been used for the storage or transportation of liquid or gaseous petroleum hydrocarbons.
 - Accordingly, Flow, TSS, Oil & Grease and pH are the only testing requirements for new pipe or vessels.
- (*3) BTEX shall be measured as the sum of benzene, toluene, ethylbenzene, and total xylene (including ortho-, meta-, and para-xylene).

EFFLUENT LIMITATIONS BASIS for Outfall 401:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b. and the previous permit.

TSS, TOC, Oil & Grease, Benzene, Total BTEX, Total Lead and pH: Limitations are based upon the Hydrostatic General Permit (LAG670000) and the previous permit.

Outfall 002 - The intermittent discharge of stormwater runoff from the north side of the facility combined with general facility washwater, fire hydrant flushings, emergency firewater pond overflow, cooling tower blowdown from Outfall 102, process area stormwater and equipment washwater from Outfall 202, and hydrostatic test water from Outfall 401

<u>Paramater</u>	Monthly Avg.	Daily Max.	Frequency	Sample Type
	(mg/l)	(mg/l)		
Flow-MGD		Report	1/month	Estimate
TOC		50	1/month	Grab
Oil & Grease		15	1/month	Grab
Temperature		Report	1/month	Grab
TDS		1500	1/month	Grab
pH Min/Max Values 00400	6.0	9.0	1/month	Grab
(Standard Units)	(Min)	(Max)		
Whole Effluent Toxicity Te	sting		1/quarter	24-hr. Composite(*1)

(*1) For Whole Effluent Toxicity testing, flow-weighted composite samples taken at Outfalls 001 and 002 shall be combined and monitored in accordance with Part II, Paragraph N(3)(d)(v).

EFFLUENT LIMITATIONS BASIS for Outfall 002:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b. and the previous permit.

TOC, Oil & Grease and pH: Limitations are based upon the previous permit and LDEQ's stormwater guidance [letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)].

TDS: Limitations for TDS are based upon the requirements of Outfall 001, which were based upon the previous permit (permit modification effective on September 1, 2001).

Temperature: The reporting requirement for Temperature is based upon the requirements of similar discharges and Outfall 001.

Whole Effluent Toxicity Testing: See Section E below for justification of requirements.

Outfall 102 - The continuous discharge of cooling tower blowdown

<u>Paramater</u>	Monthly Avg.	Daily Max.	Frequency	Sample Type
	(mg/l)	(mg/l)		
Flow-MGD		Report	1/month	Estimate
TOC		50	1/month	Grab
Oil & Grease		15	1/month	Grab
Total Residual Chlorine		Report	1/month	Grab

EFFLUENT LIMITATIONS BASIS for Outfall 102:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b.

TOC and Oil & Grease: Limitations are based upon the previous permit.

Total Residual Chlorine: Reporting requirements based upon the previous permit.

Outfall 202 - The intermittent discharge of equipment washwater and process area stormwater runoff

Paramater	Monthly Avg.	Daily Max.	Frequency	Sample Type
	(mg/l)	(mg/l)	··	
Flow-MGD	 -	Report	1/month	Estimate
BOD ₅	31	84	1/month	Grab
TSS	47	152	1/month	Grab

EFFLUENT LIMITATIONS BASIS for Outfall 202:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b.

BOD and TSS: Limitations are based upon 40 CFR 414 Subparts F and G (See calculations below) which are being applied by BPJ:

PCU production fractions:

40 CFR 414 Subpart F (Propylene production): 68.41%

BOD: Daily Maximum: 80 mg/l X 0.6841 = 54.73 mg/l Monthly Average: 30 mg/l X 0.6841 = 20.52 mg/l

TSS: Daily Maximum: 149 mg/l X 0.6841 = 101.93 mg/l Monthly Average: 46 mg/l X 0.6841 = 31.47 mg/l

40 CFR 414 Subpart G (Propane and Butane production): 31.59%

BOD: Daily Maximum: 92 mg/l X 0.3159 = 29.06 mg/l Monthly Average: 34 mg/l X 0.3159 = 10.74 mg/l

TSS: Daily Maximum: 159 mg/l X 0.3159 = 50.22 mg/l Monthly Average: 49 mg/l X 0.3159 = 15.48 mg/l

TOTAL OCPSF CONCENTRATIONS:

BOD: Daily Maximum: 54.74 mg/l + 29.06 mg/l = 84 mg/lMonthly Average: 20.52 mg/l + 10.74 mg/l = 31 mg/l

TSS: Daily Maximum: 101.93 mg/l + 50.22 mg/l = 152 mg/lMonthly Average: 31.47 mg/l + 15.48 mg/l = 47 mg/l

D. MONITORING FREQUENCIES

All monitoring frequencies are based upon the previous permit. Whole Effluent Toxicity testing frequency is based upon recommendations from the Municipal and General Water Permits Section (see Appendix A).

E. BIOMONITORING REQUIREMENTS

It has been determined that there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream. The State of Louisiana has established a narrative criteria which states, "toxic substances shall not be present in quantities that alone or in combination will be toxic to plant or animal life." The Office of Environmental Services requires the use of the most recent EPA biomonitoring protocols.

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. The biomonitoring procedures stipulated as a condition of this permit for Outfalls 001 and 002 are as follows:

TOXICITY TESTS

FREQUENCY

NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Pimephales promelas 1/quarter (*1)

NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Pimephales promelas 1/quarter (*1)

NOEC, Value [%],

1/quarter (*1)

Growth, Static Renewal, 7-Day Chronic, Pimephales promelas

1/quarter (*1)

NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Pimephales promelas

NOEC, Value [%],

1/quarter (*1)

Coefficient of Variation, Static Renewal,

7-Day Chronic,

Pimephales promelas

NOEC, Pass/Fail [0/1],

1/quarter (*1)

Lethality, Static Renewal,

7-Day Chronic,

Ceriodaphnia dubia

NOEC, Value [%],

1/quarter (*1)

Lethality, Static Renewal,

7-Day Chronic

Ceriodaphnia dubia

NOEC, Value [%],

1/quarter (*1)

Reproduction, Static Renewal,

7-Day Chronic,

Ceriodaphnia dubia

NOEC, Pass/Fail [0/1],

1/quarter (*1)

Reproduction, Static Renewal,

7-Day Chronic,

Ceriodaphnia dubia

NOEC, Value [%],

1/quarter (*1)

Coefficient of Variation, Static Renewal,

7-Day Chronic,

Ceriodaphnia dubia

(*1) Upon successfully passing the first four quarters of WET testing after permit reissuance and in the absence of subsequent lethal and/or sublethal toxicity for one or both test species at or below the critical dilution, the permittee may apply for a testing frequency reduction. If granted, the monitoring frequency for that test species may be reduced to not less than once per year for the Pimephales promelas and not less than once per six months for the Ceriodaphnia dubia.

Toxicity tests shall be performed in accordance with protocols described in the latest revision of the "Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms." The stipulated test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to

provide data representative of the toxic potential of the facility's discharge in accordance with regulations promulgated at LAC 33:IX.2715/40 CFR Part 122.48.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the test method publication mentioned in the previous paragraph. The permittee shall submit a copy of the first full report to this Office. The full report and subsequent reports are to be retained for three (3) years following the provisions of Part III.C.3 of this permit. The permit requires the submission of certain toxicity testing information as an attachment to the Discharge Monitoring Report.

This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.3105/40 CFR 124.5. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

Dilution Series

The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. The additional effluent concentrations shall be 28%, 37%, 49%, 66%, and 88% effluent. The biomonitoring critical dilution is defined as 88% effluent.

IX. Compliance History/DMR Review:

As of July 9, 2008, there are no pending enforcements actions on file.

<u>DMR Review</u> (excursions for the period January 2006 – July 2008):

Baton Rouge Fractionator Facility (LA0105538)

<u>Date</u>	Parameter Parameter	<u>Outfall</u>	Reported (mg/l)	Permit Limit (mg/l)
2/08	Oil & Grease	301	19.8 (daily max)	15 (daily max)
4/08	TOC	301	62.5 (daily max)	50 (daily max)

Propylene Concentrator Unit (LA0111082)

<u>Date</u>	<u>Parameter</u>	<u>Outfall</u>	Reported (lbs/day)	Permit Limit (lbs/day)
9/07	BOD_5	201	2.88	1:2
9/07	TSS	201	1.2	1:4

X. Endangered Species:

The receiving waterbody, Subsegment 120109 of the Terrebonne Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 24, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

XI. Historic Sites:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XII. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharges described in the application.

XIII. Variances:

No requests for variances have been received by this Office.

XIV. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

A public notice will be published in a local newspaper of general circulation and in the Office of Environmental Services Public Notice Mailing List.

XV. TMDL Waterbodies:

Enterprise Products Operating LLC discharges process area stormwater, utility wastewaters, washwater, hydrostatic test water and miscellaneous wastewaters to Segment 120109. The following TMDLs have been completed for Segment 120109:

TMDLs for Fecal Coliform Bacteria, Chlorides, Sulfates, Total Dissolved Solids (TDS), Sediment, Total Suspended Solids (TSS), and Turbidity for Selected Subsegment in the Terrebonne Basin, Louisiana (4/19/2007)

The TMDL states that Segment 120109 was only impaired for fecal coliform and that the suspected source of impairment was on-site treatment systems. Enterprise Products Operating LLC no longer discharges sanitary wastewater to surface waters. Since issuance of the last permit, the facility has installed an underground drain field for sanitary wastewaters. Since Enterprise Products Operating LLC does not discharge sanitary wastewater, no TMDL requirements have been established in the permit for Fecal Coliform.

TMDLs for Dissolved Oxygen and Nutrients in Selected Subsegments in the Upper Terrebonne Basin, Louisiana (4/2/2008)

Neither LPDES permit LA0111082, nor LA0105538 (both issued to Enterprise Products) were listed in the above dissolved oxygen and nutrients TMDL. The only facility in the TMDL that actually required reductions was a sugar mill located within Segment 120102. The TMDL states that no reductions for dissolved oxygen, ammonia, organic nitrogen, or nutrients are required for other point source dischargers, and that other point source dischargers may continue to discharge at their current levels. Therefore, no additional requirements have been added to the permit for dissolved oxygen or nutrients.

A reopener clause will be included in the permit to allow for the establishment of more stringent effluent limitations and requirements as imposed by any future TMDLs.

XVI. Stormwater Pollution Prevention Plan (SWP3) Requirements:

In accordance with LAC 33:IX.2707.I.3 and 4[40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all stormwater discharges from the facility, either through permitted outfalls, through outfalls which are not listed in the permit or as sheet flow. The Part II condition requires implementation of a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit, along with other requirements. If the permittee maintains other plans that contain duplicative information, that plan could be incorporated by reference into the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan

(BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of storm water associated with industrial activity, as defined at LAC 33:IX.2511.B.14 [40 CFR 122.26(b)(14)].